



National Transportation Safety Board Aviation Accident Final Report

Location:	THERIOT, LA	Accident Number:	FTW99LA179
Date & Time:	07/03/1999, 1200 CDT	Registration:	N8360T
Aircraft:	Robinson R22 BETA	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General Aviation - Business		

Analysis

The engine of the helicopter lost power during a repositioning flight at 500 feet above ground level. The pilot initiated a straight-in autorotation to a swampy area covered with grass 4 to 5 feet tall. The helicopter settled into the grass, rolled over on its right side and came to rest heading 180 degrees from the direction of the landing. The aircraft was recovered to the helicopter manufacturer's facility for evaluation and repairs. On August 17, 1999, the engine of the helicopter was successfully run for 20 minutes under the supervision of an FAA inspector. The inspector reported that the engine performed within the established parameters. He added that water was drained from the main fuel tank, the gascolator, and the carburetor bowl.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's inadequate preflight inspection which led to a contaminated fuel supply and subsequent loss of engine power. A factor was the lack of suitable terrain available for the forced landing.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL

Phase of Operation: CRUISE

Findings

1. (C) FLUID,FUEL - CONTAMINATION,WATER
2. (C) PREFLIGHT PLANNING/PREPARATION - INADEQUATE - PILOT IN COMMAND

Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: ROLL OVER

Phase of Operation: EMERGENCY LANDING

Findings

3. TERRAIN CONDITION - SWAMPY
4. TERRAIN CONDITION - HIGH VEGETATION
5. (F) TERRAIN CONDITION - NONE SUITABLE

Factual Information

On July 3, 1999, at approximately 1200 central daylight time, a Robinson R22 Beta helicopter, N8360T, was substantially damaged during a forced landing following a loss of engine power during cruise flight near Theriot, Louisiana. The commercial pilot and his passenger were not injured. The helicopter was registered to and operated by the pilot. Visual meteorological conditions prevailed for the 14 CFR Part 91 business flight for which a flight plan was not filed. The local repositioning flight originated from a farm near Theriot, Louisiana, approximately 10 minutes prior to the accident.

The pilot reported that the flight was scheduled to conduct an aerial survey of alligator activity in several marshes and swamps within the local area. During the third flight of the day, at 500 feet agl, the engine of the helicopter lost power without warning. The pilot initiated a straight-in autorotation to an open area covered with 4 to 5 foot tall grass.

The pilot further stated that he flared the helicopter just above the top of the tall grass, until the helicopter sank into the grass with some forward airspeed. The helicopter rolled over on its right side and came to rest heading 180 degrees from the direction of the landing. Another helicopter rescued the pilot and the passenger from the swampy area about 5 hours after the accident.

The 8,000-hour pilot reported that the tailboom separated from the airframe during the accident sequence and the powertrain system, including the main rotor blades, sustained structural damage. The helicopter was manufactured in 1997, and had accumulated a total of 557 flight hours.

The aircraft was recovered to the helicopter manufacturer's facility in Torrance, California, for damage evaluation and repairs. On August 17, 1999, the engine of the helicopter was successfully run in a dynamometer under the supervision of an FAA inspector from the Long Beach FSDO. The inspector reported that the engine performed well within the established parameters for over 20 minutes. The inspector added that water was found in the main fuel tank, the gascolator bowl, and carburetor bowl. See enclosed manufacturer's report for details of the engine run.

Pilot Information

Certificate:	Airline Transport; Commercial	Age:	33, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	03/19/1999
Occupational Pilot:	Last Flight Review or Equivalent:		
Flight Time:	8000 hours (Total, all aircraft), 250 hours (Total, this make and model), 7500 hours (Pilot In Command, all aircraft), 120 hours (Last 90 days, all aircraft), 80 hours (Last 30 days, all aircraft), 6 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Robinson	Registration:	N8360T
Model/Series:	R22 BETA R22 BETA	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	2758
Landing Gear Type:	Skid	Seats:	2
Date/Type of Last Inspection:	02/05/1999, 100 Hour	Certified Max Gross Wt.:	1370 lbs
Time Since Last Inspection:	67 Hours	Engines:	1 Reciprocating
Airframe Total Time:	557 Hours	Engine Manufacturer:	Lycoming
ELT:	Not installed	Engine Model/Series:	O-360-J2A
Registered Owner:	ROBERT J. NEIDER	Rated Power:	145 hp
Operator:	ROBERT J. NEIDER	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	, 0 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	0000	Direction from Accident Site:	0°
Lowest Cloud Condition:	Scattered / 8000 ft agl	Visibility	10 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	10 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	180°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	32° C
Precipitation and Obscuration:			
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	1150 CDT	Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	HECTOR R CASANOVA	Report Date:	09/12/2000
Additional Participating Persons:	MARY E DONAHUE; BATON ROUGE, LA RICHARD O GORDON; BATON ROUGE, LA		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinquiry@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).